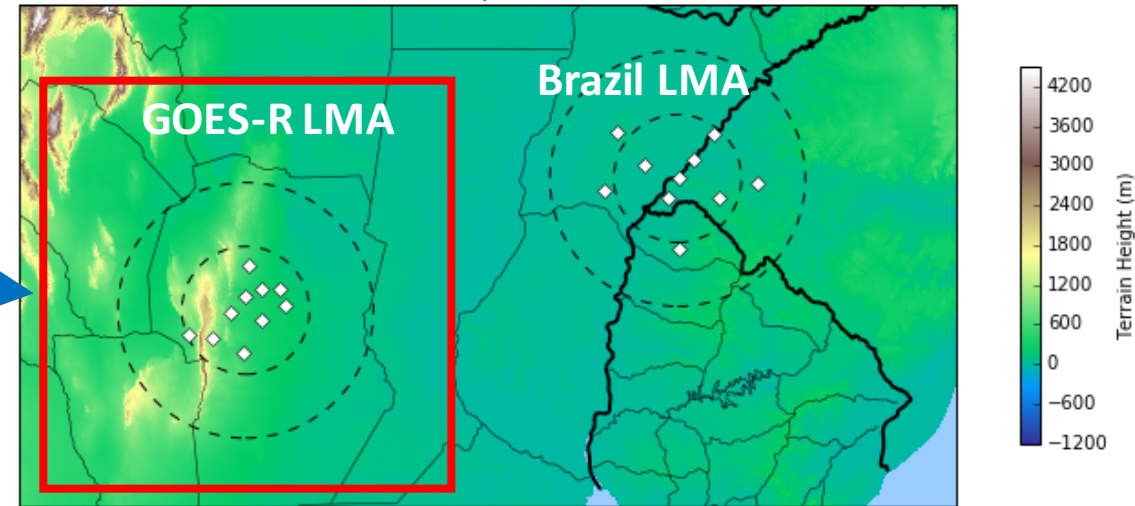


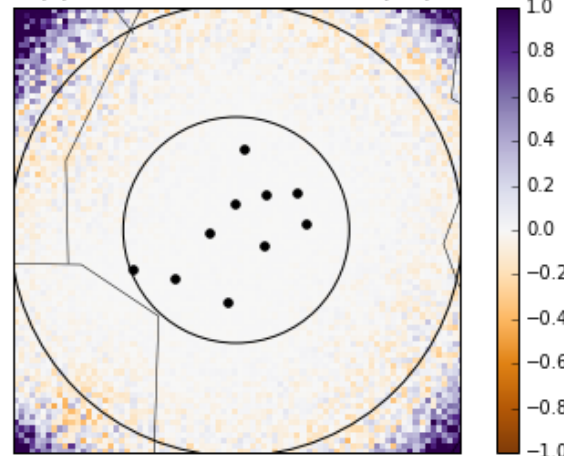
RELAMPAGO Lightning Mapping Arrays

(a) RELAMPAGO Proposed LMA Networks

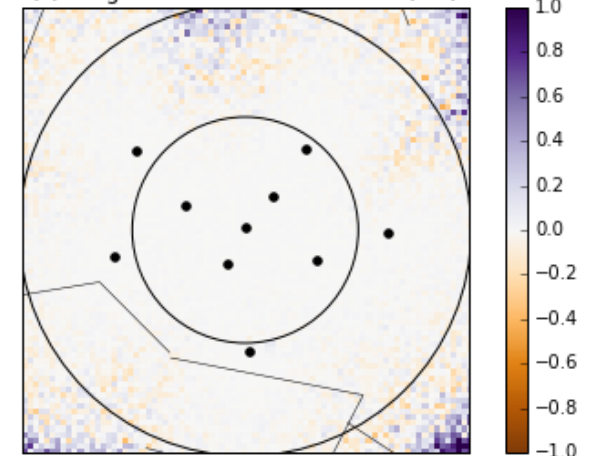


- GOES-R funding deployment of 10 MSFC LMA stations to Cordoba, Argentina in support of RELAMPAGO/CACTI field campaigns
- Nominal deployment Aug 2018 thru Feb 2019 (6 months) – RELAMPAGO is Nov/Dec 2018
- Possible co-deployment of Brazilian LMA near Argentina Border + mobile LMA (PI: Albrecht)
- Preliminary network analysis performed using Texas Tech software
- Site survey TBD, will be coordinated with RELAMPAGO site surveys
- VHF source location data will be posted to GHRC

(b) Cordoba LMA Vertical Error (km)



(c) Uruguaiiana LMA Vertical Error (km)



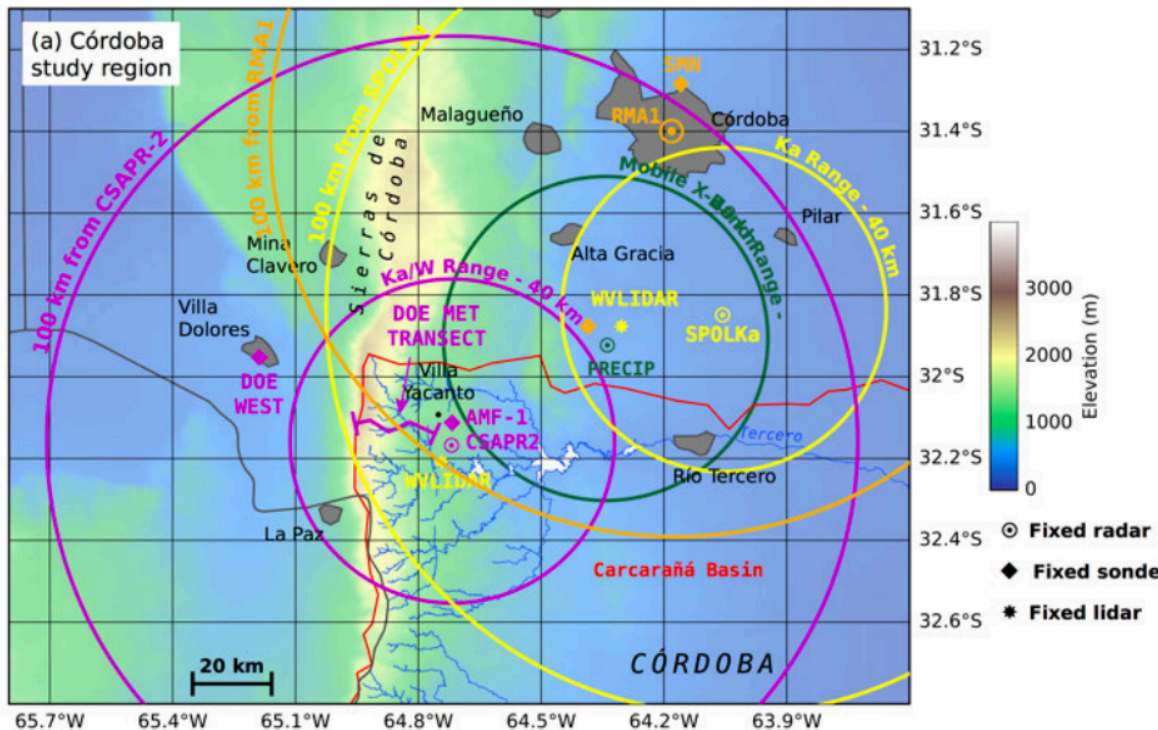
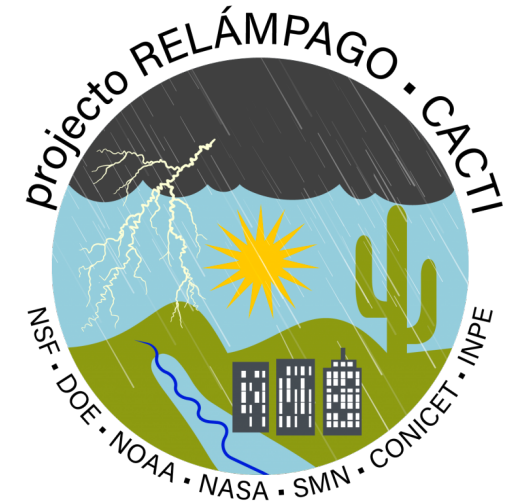
RELAMPAGO

(Remote sensing of Electrification, Lightning, And Mesoscale/microscale Processes with Adaptive Ground Observations)

CACTI

(Clouds, Aerosols, and Complex Terrain Interactions)

<http://projectorelampago.org/>



RELAMPAGO/CACTI Themes

- Convective initiation in complex terrain
- Upscale growth of convection
- Generation of hazardous weather

Relevance to GOES-R/GLM

- VHF and VLF/LF lightning mapping, EFMs
- Mobile/fixed radar assets – S, C, X, Ka, W bands
- Multiple sounding/profiler sites
- DOE AMF-1 site, G1 aircraft

GLM Likely Science and Cal/Val Targets

- Compact region – observe initiation thru MCS
- High flash rates, severe weather
- “Super-bolt” lightning – size, duration, radiance